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PATENT & TRADEMARK OFFICE

PATENT
Attorney's Docket No. 100201444-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
	)	
Yoshio Turner et al.	)	Group Art Unit: 2616
	)	
Application No.: 10/680,911	)	Examiner: J. E. Mattis
	)	
Filed: October 8, 2003	)	Confirmation No.: 6355
	)	
For: Network Congestion Control	)	
	)	

PRE-APPEAL CONFERENCE BRIEF

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated September 28, 2007, reconsideration and allowance of the present application are requested.

There are two general issues on appeal:

1. Whether claims 1-13 comply with 35 U.S.C. § 112, second paragraph;

and

2. Whether the Examiner has adequately established that independent claims 1 and 8, along with the dependent claims, are anticipated under 35 U.S.C. § 102(e) by U.S. Patent No. 6,842,424 (Key et al).

1. In rejecting claims 1-13 under 35 U.S.C. § 112, second paragraph, the Examiner asserts that the phrase "recover the particular dataflow" in the last paragraph of claim 1 is unclear. This assertion is respectfully traversed, as "the particular dataflow" clearly, and unambiguously, refers to "the particular dataflow" recited in both the "increasing" and "decreasing" steps of claim 1. Thus, this rejection of claim 1 under 35 U.S.C. § 112 is improper.

The rejection under 35 U.S.C. § 112 also asserts that the phrase "the period of time being a constant value for at least two different dataflow rates," as recited in claims 1 and 8, is unclear and that support for this phrase in the originally filed specification is unclear. These rejections are respectfully traversed. The foregoing claim 1 phrase clearly and unambiguously states that the period of time associated with at least two different flowrates is a constant value. Such a feature encompasses the function described in the specification, page 6, line 32 to page 7, line 32. For example, lines 3-4 on specification page 7 define a constant recovery time T_{rec} for two different rates r_1 and r_2. Specification page 7, line 5 specifically refers to a recovery time which "is a constant $1/R_{min}$ for all rates higher than $R'_{min.}$" Thus, withdrawal of the rejection under 35 U.S.C. § 112 with respect to independent claims 1 and 8 is required.

2. The Examiner rejected claims 1, 3-5, 8-11 and 13 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,842,424 to *Key et al.* ("Key"). Although the Examiner objected to claims 2, 6, 7 and 12 as being allowable, independent claims 1 and 8 clearly distinguish over the Key patent.

Applicant's claim 1 broadly encompasses the exemplary embodiment illustrated in FIG. 1. The illustrated embodiment represents a network environment 100 in which a source server 102 communicates with a destination client 104 via a network 106. A computer software application 108 running on source server 102 injects datapackets through a transport layer 110 across the network 106 to a corresponding transport layer 112 in client 104. Source server 102 increases and decreases the flow rate based on congestion signals in order to improve performance of network environment 100.

Claim 1 recites a method for network bandwidth utilization. Claim 1 recites among other features, increasing the rate of said particular dataflow according to an increase function if said packet marks being returned indicate no congestion; and decreasing the rate of said particular dataflow according to a decrease function if said packet marks being returned do indicate congestion, wherein the increase function is adapted to recover the particular dataflow over a period of time after a decrease in the dataflow rate, **the period of time being a constant value for at least two different dataflow rates**. Claim 8 recites a network containing similar features. These features are described in the context of an exemplary embodiment in Applicants' specification at, for example, page 6, lines 28 to page 7, line 32, and were discussed in Applicants' prior response filed July 18, 2007 (and incorporated herein by reference).

The Examiner refers to the last paragraph of claim 1 in the last sentence on page 4 of the Office Action as follows:

> Key et al. also discloses the increase function being adapted to recover the particular dataflow rate over a constant period of time after a decrease in the dataflow rate regardless of the current dataflow rate. (**See column 2 lines 58-65 of Key et al for reference to using linear functions to increase a congestion window size after a decrease meaning the increase to a particular dataflow rate will take a constant time shifted by an initial time regardless of the current dataflow rate).** (Emphasis in original.)

Column 2, lines 58-65 of the Key patent and, in particular, line 65, specifically describe the functionality of the Key patent as "a linear increase phase". Those skilled in the art will appreciate, however, that a linear increase phase will not perform the Applicants' claim 1 function of: "the period of time being a constant value for at least two different dataflow rates." (See claim 1).

To the contrary, according to the functionality described in the Key patent, if a first dataflow rate is cut in half, (e.g., 100 to 50), and a second rate flowrate is similarly cut in half (e.g., 50 to 25), then the recovery of the first dataflow rate, in a linear phase system, will occur over different periods of time (i.e., the first dataflow rate will take twice as long to recover from 50 to 100 than the second dataflow rate will require to recover from 25 to 50). In contrast, exemplary embodiments of the present invention are directed to having different dataflow rates recover in a period of time which is a "constant value." Such functionality is dramatically different from that of the Key patent, and renders claim 1 patentably distinct over the Key patent.

Accordingly, Applicants' claim 1 is allowable. Claim 8, although of different scope than claim 1, and is also allowable. All of the remaining claims are dependent, and are similarly allowable.

In the event that there are any questions concerning this paper, the Examiner is respectfully urged to telephone Applicants' undersigned representative so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 28, 2007

By: ______________________
Patrick C. Keane
Registration No. 32,858

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620